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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,867	03/21/2006	John F. Rabolt	UOD-215US	3642
66469 7.550 01/68/2010 RATNERPESTIA P.O. BOX 1596 WILMINGTON, DE 19899			EXAMINER	
			TENTONI, LEO B	
			ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			01/08/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/572.867 RABOLT ET AL. Office Action Summary Examiner Art Unit Leo B. Tentoni 1791 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 30 October 2009. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-21 is/are pending in the application. 4a) Of the above claim(s) 15-21 is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-14 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 21 March 2006 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

Paper No(s)/Mail Date 03212006;05242007;05242007.

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

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#### DETAILED ACTION

## Election/Restrictions

Applicant's election with traverse of Group I, claims 1-14 1. in the reply filed on 30 October 2009 is acknowledged. The traversal is on the ground(s) that the subject matter of claims 15-21 requires fibers prepared by the process of claim 1; the Examiner has not demonstrated that the products as claimed in claims 15-21 can be made by a process that is materially different from the process of claim 1; there would be no serious burden on the Examiner to examine all of the claims. This is not found persuasive because the restriction requirement was made under 35 USC \$121 and 35 USC \$372 and the inventions listed in Groups I - VIII do not relate to a single general inventive concept because they lack the same or corresponding special technical feature, and the claims are unpatentable over at least one reference and since the claims fail to define a contribution over at least one reference they fail to constitute a special technical feature.

The requirement is still deemed proper and is therefore made  $\ensuremath{\operatorname{FINAL}}$  .

2. Claims 15-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Applicant timely traversed the restriction (election) requirement in the reply filed on 30 October 2009.

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#### Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

 Claims 1-4, 6-10 and 12-14 are rejected under 35
 U.S.C. 102(b) as being anticipated by Senecal et al (U.S. Patent Application Publication 2001/0045547 Al).

Senecal et al (see the entire document, in particular, paragraphs [0010], [0015] and [0020] - [0023]) teaches a process of making a dyed fiber including the steps of mixing at least one dye capable of changing color and at least one polymer into at least one solvent and electrospinning the polymer dye solution to form a dyed fiber. Senecal et al does not explicitly use the terms "photochromic", "magnetochromic", "electrochromic", "thermochromic" or "piezochromic"; however, Senecal et al meets this limitation principally because Senecal et al teaches that the dye demonstrates reversible color changes consistent with chemical environmental exposures (see paragraph [0022] of Senecal et al).

## Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: Art Unit: 1791

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Senecal et al (U.S. Patent Application Publication 2001/0045547 Al) as applied to claims 1-4, 6-10 and 12-14 above, and further in view of Kasai et al (JP 01111007 A).

Senecal et al does not explicitly teach the use of a leuco body as a dye that demonstrates reversible color changes consistent with chemical environmental exposures in the manufacture of a dyed fiber (Senecal et al does teach the use of a dye (e.g., phenol red, thymol blue, phenolphthalein) that demonstrates reversible color changes consistent with chemical environmental exposures in the manufacture of a dyed fiber).

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Kasai et al (see the English-language abstract) teaches a process of making a dyed fiber including the use of a leuco body as a dye that demonstrates reversible color changes consistent with chemical environmental exposures, and it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the leuco body dye as taught by Kasai et al in the process of Senecal et al principally in order to manufacture a dyed fiber (i.e., substituting one known dye (a leuco body dye) for another known dye would have yielded predictable results to one of ordinary skill in the art at the time the invention was made).

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Senecal et al (U.S. Patent Application Publication 2001/0045547 Al) as applied to claims 1-4, 6-10 and 12-14 above, and further in view of Balkus, Jr. et al (U.S. Patent Application Publication 2003/0168756 Al).

Senecal et al does not explicitly teach the use of polymethyl methacrylate polymer in the manufacture of a dyed fiber (Senecal et al does teach the use of polymers in the manufacture of a dyed fiber). Balkus, Jr. et al (see the entire document, in particular, paragraphs [0060], [0064], [0067] and [0100]) teaches a process of making a dyed fiber including the use of polymethyl methacrylate polymer, and it would have been obvious to one of ordinary skill in the art at the time the invention was made in the process of Senecal et al in view of Balkus, Jr. et al principally in order to manufacture a dyed

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fiber from polymethyl methacrylate polymer (i.e., substituting one known polymer (polymethyl methacrylate) for other known polymers would have yielded predictable results to one of ordinary skill in the art at the time the invention was made).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo B. Tentoni whose telephone number is (571) 272-1209. The examiner can normally be reached on Monday - Friday (6:30 A.M. - 3:00 P.M.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Leo B. Tentoni/ Primary Examiner, Art Unit 1791